REMARKS

In response to the Office Action mailed April 8, 2005, Applicants respectfully request reconsideration. To further the prosecution of this Application, Applicants submit the following remarks, have canceled claims and have added new claims. The claims as now presented are believed to be in allowable condition.

Claims 1-26 were previously pending in this Application. By this Amendment, claims 1, 5, 12 and 16 have been canceled. Applicants expressly reserve the right to prosecute such canceled claims and/or similar claims in one or more related applications. Claims 27-30 have been added.

Claims 2-4, 6-8, 9-11, 13-15, 17-19, and 20-22 have been amended. Specifically, claims 2, 6, 13 and 17 have been re-written in independent form without other modification, and claim dependencies have been adjusted as necessary. The language of claim 2 has also been incorporated into independent claims 9-11 and 20-22. Claims 23 and 25 continue to recite elements similar to those of claim 2.

Accordingly, claims 2-4, 6-11, 13-15, and 17-30 are now pending in this Application. Claims 2, 6, 9-11, 13, 17, 20-22, 23 and 25 are independent claims.

Preliminary Matters

Paragraph 12 of the Office Action summary page indicates acknowledgment of a foreign priority claim, which is not applicable in this case. This appears to be a Patent Office error.

Rejections under §112

In the Office Action, claims 24 and 26 are rejected under 35 U.S.C. § 112, 1st paragraph. It is alleged in the Office Action that this subject matter is not shown in the application. The Examiner is referred to page 17 of the application for a description of this subject matter, including a specific example value of 2 for

the time-to-live (TTL) field. It is respectfully urged that this description is sufficient to satisfy 35 U.S.C. § 112, 1st paragraph with respect to the subject matter of claims 24 and 26, and that therefore this rejection should be withdrawn. Such action by the Examiner is respectfully requested.

Rejections under §102 and §103

Claims 1, 4, 5, 8-12, 15, 16 and 19-22 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,493,765 (Cunningham). Claims 2-3, 6-7, 13-14, 17-18 and 23-26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cunningham in view of certain statements in the Background section of the present application (p. 2 line 19 to p. 3 line 8), referred to in the Office Action as "applicant's admitted prior art" or AAPA. These rejections are respectfully traversed.

With respect to the rejection under 35 U.S.C. § 102(e), claims 1, 5, 12 and 16 have been cancelled, and all independent claims now include subject matter like that of claim 2. Thus, it is respectfully submitted that the rejection under 35 U.S.C. § 102 is no longer applicable and should be withdrawn.

With respect to the rejection under 35 U.S.C. § 103, in order to establish a *prima facie* case of obviousness, the Office Action must meet three criteria:

> "First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations."

In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

It is respectfully urged that all the claims recite, directly or indirectly, at least one element not taught or suggested by the cited prior art, and that therefore the rejection of the claims under 35 U.S.C. § 103(a) is improper and should be withdrawn.

Claim 2 recites a method for managing network traffic using network address translation. A first entry is created in a network address translation data structure to coordinate a first data flow from a server to a client, and a second entry is concurrently created in the network address translation data structure to coordinate a second data flow from the client to the server. A Real-Time Transport Protocol (RTP) packet is conveyed from the server to the client as a data element of the first data flow based on the first entry, and a Real-Time Transport Control Protocol (RTCP) packet is conveyed from the client to the server as a data element of the second data flow based on the second entry. As described in the specification, these flows can be part of a Real-Time Streaming Protocol (RTSP) session for the delivery of streaming audio and/or video data from the server to the client.

Cunningham is seen to show a technique for domain name resolution in a network having multiple overlapping address domains. Network address translation (NAT) source address translation and destination address translation tables are employed. As described in Figure 3 and related text beginning in column 5 (referred to in the Office Action), a NAT device receives various addresses and domain identifiers, selects a global address from a pool, creates an entry in a source address translation table mapping a host local address in one address domain to the selected global address in a second address domain, and creates an entry in the destination address translation table mapping the global address to the host local address. This operation has the effect of enabling the two-way transfer of Internet Protocol (IP) packets between two hosts in different domains, despite the "overlap" or non-uniqueness of the address of the local host. In other words, this operation is standard NAT operation.

Cunningham is not seen to teach or suggest any functionality pertaining to the Real-Time Streaming Protocol (RTSP), the Real-Time Transport Protocol (RTP), or the Real-Time Control Protocol (RTCP), and in fact the Office Action has not alleged any such teaching or suggestion in Cunningham. Although the Office Action states on page 6 that it would be obvious "to combine the teaching of Cunningham with AAPA in order to allow a standardized method of allowing streaming audio and video to the clients of Cunningham...," Cunningham is not seen to either explicitly or implicitly offer any such motivation. Cunningham makes no mention of streaming audio or video as particular applications of NAT, neither for "standardization" nor for "controlling throughput and synchronization of the data stream" as stated in the Office Action. Rather, Cunningham's technique addresses the problem of domain name resolution in a network having multiple overlapping address domains, which has no pertinent relationship to streaming audio/video.

Pages 2-3 of the Background of the present application describe the manner in which a gateway device adds entries to a NAT table in connection with an RTSP session. Separate entries are created for video channel UDP packets, audio channel UDP packets, video control channel packets, and audio control channel packets as a packet of each type is received. Each NAT entry is described as being "in preparation for any response packets coming back from (the client or server)". That is, the NAT entry for each channel is created according to standard NAT techniques. There is no description in the Background of concurrent creation of NAT entries across the various channels, nor any description in the Background of operation in a multi-domain network such as that of Cunningham. There is no mention of any desirability of a "standardized method of allowing streaming audio and video" to clients in a multi-domain network, nor of "controlling throughput and synchronization of the data stream" as recited in the Office Action. The Background simply describes how RTSP works in a gateway configured for NAT operation.

It is respectfully submitted that the combination of Cunningham and the Background cannot render claim 2 obvious, because these references fail to teach or suggest all the elements thereof. Specifically, there is no teaching or suggestion in these references of a method in which an RTP packet is conveyed from a server to a client, and an RTCP packet from the client to the server, using two concurrently created entries of a NAT data structure. As discussed above, the Background describes only multiple-channel operation of RTSP in a NAT environment, and does not teach or suggest any concurrent creation of NAT data structure entries for RTSP or any other purpose. Cunningham teaches only that source and destination NAT entries are created as part of a single process in the context of multiple-domain NAT operation, with no specific mention of RTP/RTCP or, for that matter, any two separate protocols for the entries. Thus neither the Background nor Cunningham teaches or suggest the concurrent creation of two NAT entries, one for conveying RTP packets, and one for conveying RTCP packets, as set forth in claim 2.

It is further urged that there is no particular motivation to combine the teachings of Cunningham and the Background in any way that might yield claim 2. The references are really directed to different problems that do not relate to each other in any pertinent way. Moreover, the supposed motivations that are recited in the Office Action, including "standardization" and "effective control" have no support in either of these references, and thus cannot serve as a legally adequate basis for combining them.

Based on the above, it is respectfully urged that claim 2 is not rendered obvious by Cunningham and the Background of this application, and therefore claim 2 is allowable in view of these references notwithstanding 35 U.S.C. § 103(a). Favorable action is respectfully requested.

The remaining claims incorporate, directly or indirectly, features similar to those of claim 2 discussed above, and therefore the remaining claims are likewise allowable in view of Cunningham and the Background of this application.

New Claims

New claims 27-30 are presented that are even further distinguished from the cited art. These claims specify in detail the structure of the two concurrently created entries of the NAT. Each entry includes both source address information and destination address information, and thus the concurrent creation results in two source address translation sub-entries and two destination address sub-entries, rather than one of each. Furthermore, the entries also include respective first and second port numbers of both the client and the server having predetermined relationships as established by an RTSP session. Support for these claims can be found in Figures 3-6 of the application and related text. It should be clear that neither Cunningham nor the Background in any way teaches or suggests the concurrent creation of any such pair of entries in a NAT data structure. Accordingly, these claims are also seen to be allowable in view of the cited references, and favorable action is respectfully requested.
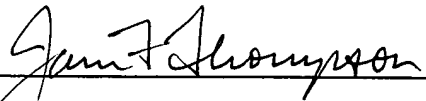
Conclusion

In view of the foregoing remarks, this Application should be in condition for allowance. A Notice to this affect is respectfully requested. If the Examiner believes, after this amendment, that the Application is not in condition for allowance, the Examiner is respectfully requested to call the Applicants' Representative at the number below.

Applicants hereby petition for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this amendment, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-0901.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 366-9600, in Westborough, Massachusetts.

Respectfully submitted,

_____

James F. Thompson
Attorney for Applicant(s)
Registration No.: 36,699
CHAPIN & HUANG, L.L.C.
Westborough Office Park
1700 West Park Drive
Westborough, Massachusetts 01581
Telephone: (508) 366-9600
Facsimile: (508) 616-9805

Attorney Docket No.: <u>CIS01-32(5136)</u>

Dated: <u>June 15, 2005</u>